UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/580,720	02/13/2007	Yasuyoshi Kato	KAWZ 200116	3886
Richard J. Minnich Fay, Sharpe, Fagan, Minnich, & McKee, LLP			EXAMINER	
			VANOY, TIMOTHY C	
	1100 Superior Avenue, 7th Floor Cleveland,, OH 44114-2518		ART UNIT	PAPER NUMBER
			1793	
			MAIL DATE	DELIVERY MODE
			03/29/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

		Application No.	Applicant(s)		
		10/580,720	KATO ET AL.		
Office Action Sun	mary	Examiner	Art Unit		
		TIMOTHY C. VANOY	1793		
The MAILING DATE of thi Period for Reply	s communication app	ears on the cover sheet with the c	orrespondence address		
A SHORTENED STATUTORY F WHICHEVER IS LONGER, FRC - Extensions of time may be available under after SIX (6) MONTHS from the mailing da - If NO period for reply is specified above, th - Failure to reply within the set or extended p	OM THE MAILING DA the provisions of 37 CFR 1.13 te of this communication. e maximum statutory period w period for reply will, by statute, three months after the mailing	'IS SET TO EXPIRE 3 MONTH(STE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be timil apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI date of this communication, even if timely filed	l. ely filed the mailing date of this communication. D (35 U.S.C. § 133).		
Status					
,	2b)⊠ This condition for allowan	ay 2006. action is non-final. ace except for formal matters, pro x parte Quayle, 1935 C.D. 11, 45			
Disposition of Claims					
4)	is/are withdrawwed. ed. ected to.				
Application Papers					
·	May 2006 is/are: a) at any objection to the cost including the correction	☑ accepted or b)☐ objected to be drawing(s) be held in abeyance. See on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).		
Priority under 35 U.S.C. § 119					
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawii 3) ☒ Information Disclosure Statement(s) (Fearer No(s)/Mail Date 05-24-2006.	ng Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal Pa	te		

Application/Control Number: 10/580,720 Page 2

Art Unit: 1793

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

In this application, the abstract exceeds 150 words in length and is (therefor) too long.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-18 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. 4,530,418 to Currie.

Claim 1 in the Currie patent describes an exhaust system for treating the exhaust gas from an internal combustion engine comprising a muffler containing a uniform diameter pipe having a diameter approximately that of the exhaust pipe, and a plurality of expanded porous material filters positioned within the pipe along its length to muffle noise, said filters being formed of at least one element of porous material and folded at pre-selected positions along the length of the element.

More specifically, figure 11 shows as liner (112) positioned within the pipe that includes a plurality of air foil baffles (114) projecting inwardly from the liner into the gas flow at an angle of 90 degrees: please see col. 9 lns. 35-43 in the Currie patent (in a manner that meets the Applicants' limitation "wherein the metal laths are laminated to form a laminate in such a manner that the drawing direction of the metal lath processing differs by 90 degrees with each other"). Also, comparing the interior of the muffler system illustrated in fig. 2 in the Currie patent to the Applicants' interior of their muffler system illustrated in Applicants' fig. 1 reveals that they are the same structure.

Finally, note that claims 12 and 13 in the Currie patent report that the interior of the muffler can be coated with alumina supporting a platinum group metal (i. e. the same oxidation catalyst layer containing a noble metal that oxidizes nitrogen oxide into nitrogen dioxide, reported in the Applicants' claims: please also note that the Applicants' specification on pg. 12, first full paragraph identifies this noble metal as platinum).

One skilled in the art would immediately envision the Applicants' filter, method for treating exhaust gas and apparatus from this Currie patent.

References Made of Record

The following additional references from the examiner's search are made of record:

- U. S. Pat. 6,889,498 B1 disclosing an emissions control system that includes an oxidation catalyst (2) effective for converting nitrogen oxides into nitrogen dioxide, and a downstream particulate trap (4): please see the abstract, and
- U. S. Pat. 6,546,717 B1 disclosing a method for removing pollutants present in an exhaust gas by reacting ozone with nitrogen monoxide to form nitrogen dioxide, and reacting the nitrogen dioxide with particulates on a diesel filter to regenerate the diesel filter: please see the abstract.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TIMOTHY C. VANOY whose telephone number is (571)272-8158. The examiner can normally be reached on Mon-Fri 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stanley Silverman, can be reached on 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/580,720 Page 5

Art Unit: 1793

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Timothy C Vanoy Primary Examiner Art Unit 1793

tcv

/Timothy C Vanoy/ Primary Examiner, Art Unit 1793